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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,975

07/21/2005

Alastair J. Martin

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12/11/2008

PHILIPS INTELLECTUAL PROPERTY & STANDARDS
595 MINER ROAD
CLEVELAND, OH 44143

EXAMINER

MCEVOY, THOMAS M

ART UNIT

PAPER NUMBER

3731

MAIL DATE

DELIVERY MODE

12/11/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/542,975	Applicant(s) MARTIN, ALASTAIR J.	
	Examiner THOMAS MCEVOY	Art Unit 3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 15, 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/21/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Invention I, claims 1-14 and 16 in the reply filed on September 10th 2008 is acknowledged. The traversal is on the ground(s) that the method claims contain all the limitations of the independent device claims. This is not found persuasive because the singular element linking the inventions together is known in the prior art and explained further below. The method claims contain additional limitations not required by the apparatus claims, such as the step of MR imaging. Examiner regards newly added claims 17 and 18 as being drawn to non-elected Invention II. The requirement is still deemed proper and is therefore made FINAL. Claims 15, 17 and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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3. Claims 1-4, 6-10, 12 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Pacetti (US 2002/0188345).

Regarding claims 1 and 14, Pacetti discloses an intravascular stent comprising: a mesh of electrically conductive material 40; and a non-conductive material 52 (Figures 5 and 6) disposed within the mesh for connecting the mesh in a generally tubular arrangement such that a net current flowing through the mesh is substantially canceled (Abstract). Regarding claim 2, the mesh of electrically conductive material comprises a plurality of struts 40 disposed in generally diagonal directions with respect to a central axis of the stent (Figure 2). Regarding claims 3, 9 and 12, in the stent described above, the non-conductive material comprises a plurality of connector elements 52 which form nodes for channeling a current through the plurality of struts (the current can be reduced or eliminated by the elements 52; claim 18). Regarding claims 4 and 10, the current flowing through the struts can be induced by RF signals within an examination region of a magnetic resonance apparatus (paragraphs 0004 and 0023). Regarding claim 6, the conductive mesh comprises a plurality of co-axial loops and a plurality of linking members for connecting the co-axial loops (Figure 2). Regarding claim 7, the non-conductive material comprises a plurality of insulating nodes (Figure 6), the insulating nodes are disposed within the conductive mesh whereby a plurality of open circuits are formed in the mesh (Figure 5). Regarding claim 8, the axial loops (Figure 5) and linking members (paragraph 0035) are connected (to themselves) within the insulating nodes whereby an induced current is channeled through the conductive mesh such that the net current in the stent is substantially minimized.

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4. Claims 1, 6, 9, 10, 14 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuehne (US WO 02/47575).

Regarding claims 1 and 9, Kuehne discloses a mesh of electrically conductive material (Figure 11) and non-conductive material (contained in diodes) disposed within the mesh for connecting the mesh into a generally tubular arrangement (p. 14, lines 3-8).

Regarding claim 6, the coaxial loops are connected by linking segments as shown in Figure 11. Regarding claims 10 and 14, the current can be induced by RF signals (p. 14, lines 3-8). Regarding claim 16, the structure in Figure 11, would produce currents of equal magnitude and opposite direction which would cancel each other.

5. Claims 1-4, 6, 7, 9, 10, 12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Keilman et al. (US 2002/0188345).

Regarding claims 1 and 9, Keilman et al. disclose an intravascular stent comprising: a mesh of electrically conductive material 145 and a non-conductive material 146 disposed within the mesh for connecting the mesh in a generally tubular arrangement such that a net current flowing through the mesh is substantially canceled (Figure 11B; col. 18, lines 12-14 and 50-61). Regarding claim 2, the struts are disposed in generally diagonal directions with respect to a central axis of the stent (Figure 11B). Regarding claims 3, 4, 10 and 14, the non-conductive material 146 serves to channel any RF generated current (as in Figure 8) into non-closed paths. Regarding claim 6, Keilman discloses that the embodiment of Figure 11B can take the form of the ACS RX MULTI-LINK stent, which has connectors for linking coaxial loops. Regarding claims 7 and 12, the non-conductive material forms insulating nodes which help form a plurality of open circuits (Figure 11B).

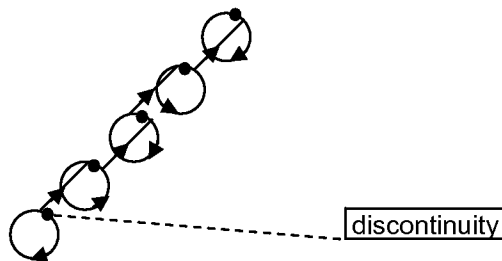
Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 5, 11, 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pacetti (US 2002/0188345).

Regarding claims 5, 11, 13 and 16, Pacetti discloses the stent as described above. Pacetti fails to disclose an arrangement of the stent rings, discontinuities 52 (non-conductive material) and connecting members 50 that channels the current so that adjacent currents of equal and opposite magnitude, which cancel each other, are generated. Pacetti discloses that any number or arrangement of the connecting members 50 and discontinuities 52 (non-conductive material) may be made to form the stent, which is only dependent on design choice (paragraphs 0034 and 0035). It therefore would have been obvious to one of ordinary skill in the art to have constructed the stent of Pacetti with, for example, one connecting member between adjacent loops and one discontinuity per loop. Any possible arrangement using these criteria would also be obvious; such as the construction shown below.



This construction would, when induced by a magnetic field, produce a current flow indicated by the arrows. This current flow, as indicated by Applicants disclosure, would cancel itself as claimed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas McEvoy whose telephone number is (571) 270-5034. The examiner can normally be reached on M-F, 9:00-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Todd Manahan can be reached on 571-272-4713. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

10. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Todd E Manahan/
Supervisory Patent Examiner, Art Unit 3731